

CLAIMS

What is Claimed is:

1. An image forming device, comprising:
 - a system memory storing data for a system operation;
 - a memory controller controlling the system memory;
 - a printing engine unit performing a printing operation to print data;
 - a controller;
 - a system bus having an address bus and a data bus;
 - a first storage storing a first function program to perform a booting and initialization of the image forming device; and
 - a second storage storing a second function program to perform a system operation and a specific function, wherein
 - the first storage and the second storage are connected to the controller via the data bus, and at least one of the first storage and the second storage is connected to the controller via the address bus.
2. The image forming device of claim 1, wherein the controller executes the first function program stored in the first storage when power is applied to the image forming device, and executes the second function program with the executed first function program to initialize the image forming device.
3. The image forming device of claim 1, wherein the second function program stored in the second storage is downloaded to the system memory.
4. The image forming device of claim 1, wherein the controller controls the first storage, the second storage, the memory controller, and the system memory.
5. An image forming device, comprising:
 - a first storage storing a first function program;
 - a system memory;
 - a second storage storing a second function program; and
 - a controller, wherein, when power or a reset signal is applied to the image forming device, the controller executes the first function program and executes the second function program after downloading the second function program to the system memory.

6. The image forming device of claim 5, wherein the controller selectively executes the second function program stored in the second storage and at least one program downloaded to the system memory.

7. The image forming device of claim 5, wherein the first function program comprises a boot program.

8. The image forming device of claim 7, wherein the second function program comprises a system operating program and an application program.

9. The image forming device of claim 8, wherein the system memory is a buffer to process data generated during an operation of the image forming device in accordance with an execution of the system operating program and the application program.

10. The image forming device of claim 8, further comprising:
a memory controller downloading the system operating program stored in the second storage to the system memory according to a control from the controller.

11. The image forming device of claim 5, further comprising:
a system bus comprises an address/data bus and a control bus to connect the first storage, the second storage, the memory controller, and the system memory.

12. The image forming device of claim 5, further comprising:
a display portion displaying a general operating status of the image forming device according to a control of the controller.

13. The image forming device of claim 5, further comprising:
an interface portion supporting communication between the image forming device and a host computer, wherein the controller converts printing data from the host computer via the interface portion to data to be processed by a printing engine unit.

14. The image forming device of claim 8, wherein the boot program is stored in the first storage and the operating program and the application program are stored in the second storage allowing a selective upgrade and management of the programs.

15. A method of an image forming device comprising a first storage, a second storage, a memory controller, a system memory, a controller, and an interface portion, the method comprising:

- applying power or a reset signal to initialize the image forming device;
- executing a boot program stored in the first storage;
- downloading a system operating program stored in the second storage to the system memory; and
- executing the operating program stored in the system memory when the downloading is complete.